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EXAMINER

LAFORGIA, CHRISTIAN A

ART UNIT PAPER NUMBER

2131

DATE MAILED: 09/17/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/541,185

Applicant(s)

HAYBALL ET AL.

Examiner

Christian La Forgia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The amendment filed on 07 July 2003 is noted and made of record.
2. Claims 1 through 27 are presented for examination.

Drawings

3. The drawings were received on 07 July 2003. These drawings are accepted by the Examiner.
4. Applicant is reminded that the Patent and Trademark Office no longer makes drawing changes and that it is applicant's responsibility to ensure that the drawings are corrected in accordance with the instructions set forth in Paper No. 2, mailed on 02 April 2003.

Specification

5. The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

Priority

6. If applicant desires priority under 35 U.S.C. 119 based upon a previously filed application, specific reference to the earlier filed application must be made in the instant application. For benefit claims under 35 U.S.C. 120, 121 or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of the applications. This should appear as the first sentence of the specification following the title, preferably as a separate paragraph unless it appears in an application data sheet. The status of nonprovisional parent application(s) (whether patented or abandoned) should also be included. If a parent application has become a patent, the expression "now Patent No. ____" should follow the filing date of the

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parent application. If a parent application has become abandoned, the expression “now abandoned” should follow the filing date of the parent application.

7. If the application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A priority claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed claim for priority under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was

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unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Response to Arguments

8. Applicant's arguments filed 07 July 2003 have been fully considered but they are not persuasive.

9. In response to the Applicant's arguments that Dravida does not disclose a model of the network which is separate from the network, the Examiner respectfully disagrees. As seen in Figure 21, block 2101, Dravida teaches obtaining a network topology. According to <http://www.dictionary.com> the computer science definition of topology is:

The arrangement in which the nodes of a LAN are connected to each other.

In the instant application, the Examiner interprets topology and model to be synonymous as the model relates to the arrangement of the network. Furthermore, the limitation of making the model separate from the network changes from a 102 rejection to a 103 rejection as the act of making the model separate from the network has obvious benefits, which are discussed below.

10. With regards to the Applicant's arguments that Dravida does not teach producing paths having a specified bandwidth or a guaranteed quality of service and assessing the amount of available bandwidth over said path using said model, the Examiner believes this function to be inherent to that Dravida patent. Dravida discusses producing paths having a specified bandwidth and a guaranteed quality of service in column 5, lines 41 to 63. Dravida is quoted as stating:

...during times of congestion, some fraction of the packets normally routed on primary routes are instead routed on secondary or alternate paths that are lightly loaded.

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One of ordinary skill in the art would appreciate that there is a bandwidth limitation given to every route, if there were no limitation on bandwidth there would be no problems with congestion arising. Newton's Telecom Dictionary defines congestion as:

A condition that arises when a communication link, path or network experiences an offered load (i.e., the amount of traffic offered) that exceeds its capacity.

Therefore, each path has a maximum allowed bandwidth allowed for each path. Dravida ensures a guaranteed quality of service by assessing the bandwidth on each route and then reroutes packet based on the available bandwidth to secondary or lighter loaded paths to prevent congestion from occurring over the primary routes. Furthermore, Dravida teaches provisioning information to provision said path using said model for output to the network or a network simulator after assessing the path situation and setting up the alternate routes.

11. See further rejections that follow.

Claim Rejections - 35 USC § 103

12. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

13. Claims 1 through 10, 13 through 17, 20 through 22, and 25 through 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 5,253,248 to Dravida et al., (hereinafter Dravida), in lieu of obviousness.

14. As per claim 1, Dravida teaches a method of provisioning a path between two specified nodes in a connectionless communications network such that the path has a specified bandwidth and a guaranteed quality of service is provided over that path, wherein the communications network supports a differentiated service mechanism, solid method comprising the steps of:

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(i) specifying a bandwidth and guaranteed quality of service to be provided over the path (column 5, lines 41-63);

(ii) accessing a model of the connectionless communications network which is separate from the network (Figures 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 [block 2101, 2103, 2104], 28 [block 2801], 29, & 30; column 8, lines 27-60; column 11, line 53 to column 12, line 44);

(iii) determining a path between the two specified nodes using the model (Figures 21 [blocks 2102, 2104, 2105], 22 [blocks 2201, 2202, 2203], 23 [blocks 2230, 2240], 24 [blocks 2401, 2402, 2403, 2404, 2405, 2406], & 28 [blocks 2820, 2830]; column 9, lines 17-44; column 9, line 58 to column 10, line 29);

(iv) assessing the amount of available bandwidth over the path using the model (Figures 24 [blocks 2403, 2404, 2405], 25 [block 2408], 26 [block 2601], 27 [block 2740], 28 [block 2802], & 30; column 10, lines 41-53; column 12, lines 13-44); and

(v) producing provisioning information to provision the path using the model for output to the network or a network simulator (Figures 21 [blocks 2103, 2104], 22 [blocks 2202, 2203], 23 [blocks 2230, 2240], 24 [blocks 2401, 2402], 26 [blocks 2603, 2604], 27 [blocks 2760, 2750], & 28 [blocks 2820, 2830]; column 9, lines 17-44; column 11, lines 23-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to keep a model of the network separate from the network. One would be motivated to do so because it would provide a more reliable method to calculate the shortest path through a network. The model would be used to predict and troubleshoot problems before and as they occurred, therefore creating a system completely dedicated to solving problems over a network. This is further obvious under making a part separable from the whole, which meets the grounds for an

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obviousness-type rejection as seen in *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961).

15. Regarding claim 2, Dravida teaches wherein the step (iii) of assessing the amount of available bandwidth comprises accessing a bandwidth tally for each node in the path (Figures 21 [block 2102], 22 [blocks 2202, 2203], 24 [blocks 2404, 2405], 25 [block 2408], 28 [block 2802], & 30; column 9, lines 44-58; column 10, lines 1-22; column 12, lines 12-55)

16. With regards to claim 3, Dravida teaches which further comprises accessing a bandwidth tally for each link in the path (Figures 21 [block 2102], 22 [blocks 2202, 2203], 24 [blocks 2404, 2405], 25 [block 2408], 28 [block 2802], & 30; column 9, lines 44-58; column 10, lines 1-22; column 12, lines 12-55).

17. Regarding claim 4, Dravida teaches which further comprises inputting the provisioning information to the communications network in order to provision the communications network (Figures 21 [block 2101], 22 [block 2201], 24 [blocks 2401, 2402, 2406], 25 [blocks 2407, 2409], & 28 [blocks 2801, 2802, 2820, 2830]; column 9, lines 16-44; column 11, line 53 to column 12, line 13).

18. Regarding claim 5, Dravida teaches wherein the path is auto generated (Figure 24, 26 [blocks 2603, 2604], 27 [blocks 2760, 2750], & 28 [blocks 2820, 2830]; column 12, lines 6-13).

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19. Concerning claim 6, Dravida teaches wherein the path is determined using the shortest path first algorithm (column 9, lines 16-44).

20. Regarding claim 7, Dravida teaches wherein the path is determined using a discovery method (Figures 21, 22 [blocks 2202, 2203], 23 [blocks 2230, 2240], 24 [blocks 2401, 2402, 2403, 2406]; column 9, lines 7-44).

21. With regards to claim 8, Dravida teaches wherein the path is pre-specified by a network operator (Figures 26 [blocks 2603, 2604], 27 [blocks 2760, 2750, 2740], & 28 [blocks 2820, 2830]; column 11, lines 22-53).

22. Regarding claim 9, Dravida teaches which further comprises the step of adding service type labels to traffic (Figures 26 [blocks 2603, 2604], 27 [blocks 2760, 2750, 2740], & 28 [blocks 2820, 2830]; column 11, lines 22-53; column 11, line 53 to column 12, line 13).

23. Regarding claim 10, Dravida teaches wherein the connectionless communications network is an Internet protocol communications network (column 1, lines 12-24; column 4, lines 43-66).

24. Regarding claim 13, Dravida teaches wherein the differentiated service mechanism comprises priority queuing (Figure 26; column 4, lines 22-28).

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25. Regarding claim 14, Dravida teaches wherein the differentiated service mechanism comprises allocating traffic to one of two or more service types and one of the two specified nodes is arranged to label traffic according to its allocated service type (Figures 26 [blocks 2603, 2604], 27 [blocks 2760, 2750, 2740], & 28 [blocks 2820, 2830]; column 11, lines 22-53; column 11, line 53 to column 12, line 13).

26. Regarding claim 15, Dravida teaches wherein the differentiated service mechanism comprises allocating traffic to one of two or more service types and wherein the method further comprises determining the proportion of the bandwidth at a given node or link that is reserved for use by traffic of a given service type (Figures 21 [block 2102], 22 [blocks 2202, 2203], 24 [blocks 2404, 2405], 25 [block 2408], 28 [block 2802], & 30; column 9, lines 44-58; column 10, lines 1-22; column 10, line 41 to column 11, line 5; column 12, lines 12-55).

27. Regarding claim 16, Dravida teaches wherein the provisioning information is determined such that the proportion is less than a specified threshold level (Figures 21 [block 2102], 22 [blocks 2202, 2203], 24 [blocks 2404, 2405], 25 [block 2408], 28 [block 2802], & 30; column 10, line 41 to column 11, line 5).

28. As per claim 17, Dravida teaches a computer system for provisioning a path between two specified nodes in a connectionless communications network such that the path has a specified bandwidth and a guaranteed quality of service, wherein the communications network supports a differentiated service mechanism, the computer system comprising:

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(i) a processor arranged to access a model of the connectionless communications network which is separate from the network and to record a specified bandwidth and guaranteed quality of service for the path (Figures 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 [block 2101, 2103, 2104], 28 [block 2801], 29, & 30; column 5, lines 41-63; column 8, lines 27-60; column 11, line 53 to column 12, line 44);

(ii) the processor being arranged to determine a path between the two specified nodes using the model (Figures 21 [blocks 2102, 2104, 2105], 22 [blocks 2201, 2202, 2203], 23 [blocks 2230, 2240], 24 [blocks 2401, 2402, 2403, 2404, 2405, 2406], & 28 [blocks 2820, 2830]; column 9, lines 17-44; column 9, line 58 to column 10, line 29); and wherein the processor is further arranged to assess the amount of available bandwidth over the path using the model (Figures 24 [blocks 2403, 2404, 2405], 25 [block 2408], 26 [block 2601], 27 [block 2740], 28 [block 2802], & 30; column 10, lines 41-53; column 12, lines 13-44); and

(iii) wherein the processor is further arranged to use the model to produce provisioning information to provision the path for output to the network or a network simulator (Figures 21 [blocks 2103, 2104], 22 [blocks 2202, 2203], 23 [blocks 2230, 2240], 24 [blocks 2401, 2402], 26 [blocks 2603, 2604], 27 [blocks 2760, 2750], & 28 [blocks 2820, 2830]; column 9, lines 17-44; column 11, lines 23-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to keep a model of the network separate from the network. One would be motivated to do so because it would provide a more reliable method to calculate the shortest path through a network. The model would be used to predict and troubleshoot problems before and as they occurred, therefore creating a system completely dedicated to solving problems over a network. This is further obvious under making a part separable from the whole,

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which meets the grounds for an obviousness-type rejection as seen in *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961).

29. Regarding claim 20, Dravida teaches wherein the processor is further arranged to access a bandwidth tally for each node in the path (Figures 21 [block 2102], 22 [blocks 2202, 2203], 24 [blocks 2404, 2405], 25 [block 2408], 28 [block 2802], & 30; column 9, lines 44-58; column 10, lines 1-22; column 12, lines 12-55).

30. Regarding claim 21, Dravida teaches wherein the processor is arranged to determine the path using auto generation (Figure 24, 26 [blocks 2603, 2604], 27 [blocks 2760, 2750], & 28 [blocks 2820, 2830]; column 12, lines 6-13).

31. Regarding claim 22, Dravida teaches wherein the connectionless communications network is an Internet protocol communications network (column 1, lines 12-24; column 4, lines 43-66).

32. Regarding claim 25, Dravida teaches wherein the differentiated service mechanism comprises priority queuing (Figure 26; column 4, lines 22-28).

33. As per claim 26, Dravida teaches computer program stored on a computer readable medium, the computer program being arranged to control a computer system for provisioning a path between two specified nodes in a connectionless communications network such that the

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path has a specified bandwidth and a guaranteed quality of service is provided over that path, wherein the communications network supports a differentiated service mechanism; the computer program being arranged to control the computer system such that:

(i) a model of the connectionless communications network is accessed which is separate from the network (Figures 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 [block 2101, 2103, 2104], 28 [block 2801], 29, & 30; column 8, lines 27-60; column 11, line 53 to column 12, line 44);

(ii) a path between the two specified nodes is determined using the model (Figures 21 [blocks 2102, 2104, 2105], 22 [blocks 2201, 2202, 2203], 23 [blocks 2230, 2240], 24 [blocks 2401, 2402, 2403, 2404, 2405, 2406], & 28 [blocks 2820, 2830]; column 9, lines 17-44; column 9, line 58 to column 10, line 29);

(iii) the amount of available bandwidth over the path is assessed using the model (Figures 24 [blocks 2403, 2404, 2405], 25 [block 2408], 26 [block 2601], 27 [block 2740], 28 [block 2802], & 30; column 10, lines 41-53; column 12, lines 13-44); and

(iv) provisioning information for output to the network or a network simulator to provision the path is produced using the model (Figures 21 [blocks 2103, 2104], 22 [blocks 2202, 2203], 23 [blocks 2230, 2240], 24 [blocks 2401, 2402], 26 [blocks 2603, 2604], 27 [blocks 2760, 2750], & 28 [blocks 2820, 2830]; column 9, lines 17-44; column 11, lines 23-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to keep a model of the network separate from the network. One would be motivated to do so because it would provide a more reliable method to calculate the shortest path through a network. The model would be used to predict and troubleshoot problems before and as they occurred, therefore creating a system completely dedicated to solving problems over a network. This is

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further obvious under making a part separable from the whole, which meets the grounds for an obviousness-type rejection as seen in *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961).

34. Regarding claim 27, Dravida teaches a connectionless communications network (Abstract).

35. Claims 11, 18, and 19, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dravida in view of United States Patent No. 6,430,154 to Hunt et al., (hereinafter Hunt).

36. Regarding claim 11, Dravida does not teach wherein the path is a virtual leased line.

37. Hunt teaches wherein the path is a virtual leased line (column 2, lines 23-46). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the leased lines of Hunt with the system of Dravida because it would ensure a low loss and low delay service to subscribers. It would enable this low loss and low delay by taking into account the random breaks in communication lines by other objects that take precedence.

38. Regarding claim 18, Dravida does not teach which further comprises a graphical user interface provided on a client computer connected to the computer system.

39. Hunt teaches which further comprises a graphical user interface provided on a client computer connected to the computer system (Figure 2 [block 22]; column 8, lines 32-48).

Therefore it would have been obvious to one with ordinary skill in the art to combine the GUI of

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Hunt with the system of Dravida because it would enable a better way to manage network traffic. By giving the ability to see where congestions lie in a graphical setting, it would allow a user to be able to reroute information accordingly.

40. With regards to claim 19, Dravida does not teach wherein the graphical user interface is web-based.

41. Hunt teaches wherein the graphical user interface is web-based (Figure 2 [block 22]; column 8, lines 32-48). It would have been obvious to one with ordinary skill in the art to combine the web based interface of Hunt with the system of Dravida because it would enable a better way to manage Internet traffic. By giving the ability to see where congestions lie in a graphical setting, it would allow a user to be able to reroute information accordingly.

42. Regarding claim 23, Dravida does not teach wherein the path is a virtual leased line.

43. Hunt teaches wherein the path is a virtual leased line (column 2, lines 23-46). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the leased lines of Hunt with the system of Dravida because it would ensure a low loss and low delay service to subscribers. It would enable this low loss and low delay by taking into account the random breaks in communication lines by other objects that take precedence.

44. Claims 12 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dravida in view of United States Patent No. 5,7510,969 to Kapoor, (hereinafter Kapoor).

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45. Regarding claim 12, Dravida does not teach which further comprises the step of inputting information about the path, the specified bandwidth and quality of service, the differentiated service mechanism and the provisioning information to a simulator which is arranged to forecast traffic congestion points in the connectionless communications network.

46. Kapoor teaches which further comprises the step of inputting information about the path, the specified bandwidth and quality of service, the differentiated service mechanism and the provisioning information to a simulator which is arranged to forecast traffic congestion points in the connectionless communications network (Figures 3, 4, & 5; column 4, lines 12-67).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the forecast traffic congestion points of Kapoor with the system of Dravida, because it would enable a quicker and more efficient manner to transfer packets over a connectionless network. It would ensure this quicker and more efficient manner, by predicting bottlenecks and routing information around them, thus allowing the use of the alternative routing paths.

47. Regarding claim 24, Dravida does not teach which further comprises a simulator arranged to accept information about the path, the specified bandwidth and quality of service, the differentiated service mechanism and the provisioning information and wherein the simulator is arranged to forecast traffic congestion points in the connectionless communications network.

48. Kapoor teaches which further comprises a simulator arranged to accept information about the path, the specified bandwidth and quality of service, the differentiated service mechanism and the provisioning information and wherein the simulator is arranged to forecast traffic

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congestion points in the connectionless communications network (Figures 3, 4, & 5; column 4, lines 12-67). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the forecast traffic congestion points of Kapoor with the system of Dravida, because it would enable a quicker and more efficient manner to transfer packets over a connectionless network. It would ensure this quicker and more efficient manner, by predicting bottlenecks and routing information around them, thus allowing the use of the alternative routing paths.

Conclusion

49. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

50. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

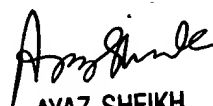
51. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian La Forgia whose telephone number is (703) 305-7704. The examiner can normally be reached on Monday thru Thursday 7-5.

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52. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (703) 305-9648. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

53. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Christian La Forgia
Patent Examiner
Art Unit 2131
clf


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100